

ABSTRACT OF THE DISCLOSURE

A transistor header assembly for use in transmitter optical subassemblies of optical transceivers. The header assembly has a base with a platform extending through. The platform has a conductive trace extending through the platform for making connections on both sides of the base. A thermoelectric cooler (TEC) is used to dissipate heat from a laser within the header assembly. The TEC dissipates heat sufficiently to allow an externally modulated laser (EML) to be used in the header assembly. In this manner, EMLs can be used in relatively small optical devices, including small form factor transceivers that comply with the XFP standard. The XFP modules with EMLs can be used for longer links than XFPs without EMLs. In addition, EMLs can be stabilized using TECs so that XFP modules can be used for DWDM-type applications.